

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:	LUMPKIN)	
SERIAL NO.:	10/679,128)	EXAMINER: JOHNSON,
)	MATTHEW A.
FILED:	OCTOBER 3, 2003)	ART UNIT: 3656
TITLE:	SYMMETRIC CLAMP STRUCTURE)	CONFIRMATION NO.: 2259

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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Sir:

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. The review is requested for the reasons stated below.

A final Office Action was mailed in the above-captioned application on September 3, 2009. Claims 1-17 are pending in the application. Claims 1-17 stand rejected.

I. Claim Rejections – 35 U.S.C. § 103

A. Claims 1-4, 6-8, 10 and 14-16

Claims 1-4, 6-8, 10 and 14-16 stand rejected under 35 U.S.C. § 103(a) as obvious over by Nielsen, U.S. Patent No. 6,186,027 in view of Hand, U.S. Patent No. 1,870,112.

Claim 1 requires a clamp having a first arm defining a first threaded through bore and a second arm defining a second threaded through bore, with the first threaded through bore and the second threaded through bore being essentially coaxial *and essentially the same inner diameter*. Claim 1 further requires a screw having a head and a shank with the shank having a threaded portion opposite the head and a clearance portion between the threaded portion and the head. The screw is configured *for selective insertion in one of the first and second threaded through bores* so that with a threaded engagement between the threaded portion of the shank and one of the first threaded through bore of the first arm or the second threaded through bore of the second arm and the head abutting the other of the first and second arms opposite the threaded

engagement, the clearance portion resides within the other of the first and second threaded through bores. As acknowledged by the Examiner, this last limitation requires that the screw is capable of being screwed into both threaded bores. Final Office Action, p. 2, sec. 2. This relatively simple structure provides a clamp that can be symmetric in that a single screw can be selectively inserted into either threaded bore and the clamp still functions. This enables a device using the clamp be symmetric and thus, for example, disposed on either a left or right handle bar of a bike without a difference in appearance of the clamp structure. As an additional advantage, if one of the threaded through bores becomes stripped, the clamp can still function by inserting the screw into the stripped through bore so that the threads engage the other through bore.

The Examiner has failed to make a *prima facie* showing of obviousness of independent claim 1 over Nielsen in view of Hand. Simply stated, Nielsen does *not* teach threaded bores of essentially the same inner diameter and in fact teaches away from threaded through bores of essentially the same inner diameter. Hand does not cure this deficiency.

Fig. 3 of Nielsen clearly shows first and second arms 42A, 42B with axially aligned through bores, but only the through bore in the second arm 42B is shown as threaded. The Examiner relies on language at column 3, lines 25-28 to support the first through bore in the first arm 42A as being threaded. Nielsen reads at column 3, lines 25-28 as follows:

“As shown in FIG. 3, the hole in lug 42B is threaded to mate with the threaded shank of screw 40. The hole in lug 42A may but need not be threaded, *but is sized so that screw 40 can be rotated therein.*” (Emphasis added.)

The bolt 40 illustrated in Fig. 3 is a conventional bolt where threads are formed in a threaded portion having an outer diameter equal to an outer diameter of a non-threaded portion of the shaft. This non-threaded portion of the shaft is adjacent the head of the bolt 40 depicted in Fig. 3. In order for the bolt 40 to be fully received in the axially aligned through bore in the first arm 42A, this through bore must have an inner diameter greater than the outer diameter of the threaded portion and the non-threaded portion of the bolt 40. Accordingly, if, as suggested in the specification, the through bore 42A is threaded, the inner diameter of the threads would have to clear the non-threaded portion of the bolt if the structure is to function as a clamp configuration indicated in Fig. 3 (i.e., it must be “sized so that the screw 40 can be rotated therein.”). However, in such a configuration the threaded portion of the bolt would necessarily have to clear the threads in 42A without threaded engagement. (This is because as discussed above, the non-

threaded portion and the threaded portion of bolt 40 have the same outer diameter.) Thus, the structure taught in Nielsen would not function as a clamp if the bolt 40 were inserted through the second through bore 42B for at least two reasons. First, the threads of the bolt have an outer diameter less than the inner diameter of the threads in the through bore 42A and there would thus not be threaded engagement between the threaded portion of the bolt 40 and the threads of 42A. Second, the non-threaded portion of the bolt 40 would interfere with the threads of the second through bore 42B such that the bolt could only be screwed into threaded through bore 42B up to the point of the non-threaded portion. Accordingly, modification of Fig. 3 as suggested by the Examiner in light of the Nielsen specification would not meet the threaded bores of essentially the same inner diameter limitation of claim 1.

In addition, Nielsen fails to teach a screw configured for selective insertion in one of the first and second threaded through bores so that with a threaded engagement between the threaded portion of the shank and one of the first threaded through bore of the first arm or the second threaded through bore of the second arm and the head abutting the other of the first and second arms opposite the threaded engagement, the threaded portion resides within the other of the first and second threaded through bores. In other words, while the limitations can be met in part by insertion of the bolt 40 into a threaded through bore in 42A as depicted in Fig. 3, it would not be insertable in the second threaded through bore of the second arm 42B in a manner meeting the limitations of claim 1.

Hand does not overcome this failure to show threaded through bores of essentially the same inner diameter. Indeed, Hand teaches away from such a structure. Fig. 2 shows the clamp structure of Hand in cross-section. This structure includes a hole 5 which receives a reduced diameter portion of the bolt, and an axially aligned hole 4, which mates with the threaded portion of the screw 9. The hole 5 has a significant smaller inner diameter than the hole 4. The different hole size is necessary for the proper operation of the Hand clamp. As is clear from the specification, the Hand structure is intended to function such that with the bolt fully screwed into the hole 4 in a clockwise direction it clamps the body 1. However, with the bolt unscrewed in a counter-clockwise direction, the shoulder 10 contacts the periphery of the smaller bore 5, forcing the clamp apart. See Hand, page 1, lines 60-69.

It should further be noted that simply substituting the bolt of Hand for the screw of Nielsen does not render claim 1 obvious because, as explained above, Nielsen requires threaded

through bores of different inner diameters. Thus, the bolt of Hand might be able to perform a clamping function when inserted into one of the through bores, but it could not perform that clamping function when inserted in the other of the through bores because the inner diameter of the other through bore would be larger than the inner diameter of the first through bore.

The conclusory statement of the Examiner that one of skill in the art would “readily recognize that the bore 42A would be threaded in the same manner as the treaded bore in 42B” (see Final Office action p. 17) and thus have essentially the same inner diameter utter ignores the express teaching of Nielsen as discussed in detail above. Certainly the Examiner provides no reason *why* a person of skill in the art would be lead to modify Nielsen in this way. No compelling reason for making such a substitution can be shown by the Examiner absent a forbidden hindsight analysis beginning with Applicant’s invention as described in the specification and recited in the claims.

Accordingly, reconsideration and withdrawal of the rejection of claim 1 and claims 2-4 and 14, which are dependent from claim 1, are respectfully requested.

Claim 6 recites first and second threaded through bores having essentially the same size and pitch threading. Claim 6 is not obvious over the combination of Nielsen and Hand because, as set forth above, Nielsen and Hand cannot be combined to teach the element of first and second threaded through bores having the same size and pitch threading. Accordingly, reconsideration and withdrawal of this rejection of claim 6 and claim 7-8 and 15, which are dependent from claim 6, are respectfully requested.

Claim 10 recites forming “identical co-axial cylindrical threaded through bores through the distal ends of first and second arms.” As discussed above with respect to claim 1, none of the applied references alone or in combination teach identical coaxial threaded through bores. Thus, reconsideration and withdrawal of the rejection of claim 10 and claim 16, which is dependent from claim 10, are respectfully requested.

B. Claim 9

Claim 9 is rejected under 35 U.S.C. § 103(a) as being obvious over Nielsen in view of Hand and further in view of Duda, U.S. Patent No. 2,287,343.

Claim 9 is dependent from claim 6. Duda fails to overcome the deficiencies of Nielsen in view of Hand discussed above with respect to claim 6. Namely, Duda does not teach opposing threaded through bores of essentially the same size. Instead, Duda teaches a threaded opening 8

and opening 10 which is unthreaded. Only in one orientation, namely when the threaded bolt 9 is inserted first in the unthreaded hole 10, can the device function as a clamp. See column 2, lines 39-44. Of course, one skilled in the art would understand that the hole 10 must have a larger inner diameter than the hole 8 or the shaft of the bolt 9 cannot be slidably received in the unthreaded opening 10. Thus, reconsideration and withdrawal of rejection of claim 9 are respectfully requested.

C. Claims 1, 4, 5, 11-13 and 17

Claims 1, 4, 5, 11-13 and 17 stand rejected under 35 U.S.C. § 103(a) as being obvious over Gelbein, U.S. Patent No. 5,584,210 in view of Nielsen and further in view of Hand

Gelbein does not overcome the deficiencies of the teachings of Nielsen and Hand. Specifically, Gelbein does not teach opposing threaded through bores having essentially the same inner diameter. Thus, claim 1 and its dependent claims (4 and 5) cannot be rendered obvious by this combination of references.

Claim 11 also includes the limitation "first and second threaded through bores being essentially coaxial and of essentially the same inner diameter." Thus, claim 11 cannot be rendered obvious by a combination of Gelbein, Nielsen and Hand for the same reasons discussed above with respect to claim 1. Likewise, claims 12, 13 and 17, which are dependent from claim 11, cannot be rendered obvious by this combination of references. Thus, reconsideration of and withdrawal of these grounds of rejection are respectfully requested.

In summary, Applicant respectfully submits that claims 1-17 are patentable over the applied art and prompt issuance of a Notice of Allowance is respectfully requested.

Respectfully submitted,

/TD Bratschun/

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